

July 9, 2003

Commissioner for Patents  
Alexandria, VA 22313

RE: Application No. Unassigned  
Filed: July 9, 2003

**BINDER FOR A LITHIUM-SULFUR BATTERY, POSITIVE ACTIVE MATERIAL  
COMPOSITION COMPRISING SAME AND LITHIUM-SULFUR BATTERY  
USING SAME**

Inventor: Seok KIM, *et al.*  
Our Ref: 6161.0068.AA

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.  
Patent and Trademark Office:

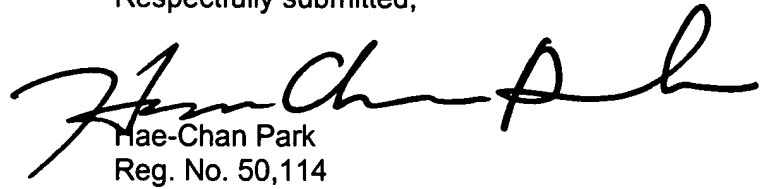
1. A Transmittal Letter;
2. Utility Patent Application Transmittal Form;
3. A Specification containing 22 pages and 2 sheets of drawings (Figs. 1 and 2);
4. An executed Declaration and Power of Attorney;
5. A Form PTO-1595 Recordation Cover Sheet and a copy of the executed Assignment to Samsung SDI Co., Ltd., a recordation of which is hereby respectfully requested;
6. Claim of Priority to and a copy of:  
Korean Patent Application No. 10-2002-0040006 filed July 10, 2002;
7. Our Check No. 119922 for the amount of \$930.00 to cover the filing fee and our check no. 119923 for the amount of \$40.00 to cover the assignment recordation fee; and
8. Two acknowledgement postcards.

It is respectfully requested that the attached copy of the postcard be stamped with the filing date of these documents and returned to our courier.



The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 23-1951 referencing docket number 6161.0068.AA.

Respectfully submitted,



Hae-Chan Park  
Reg. No. 50,114

HCP/tmk  
Enclosures

# UTILITY PATENT APPLICATION TRANSMITTAL

## (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
6161.0068.AA

Total Pages in this Submission

### TO THE ASSISTANT COMMISSIONER FOR PATENTS

B x Pat nt Application  
Washingt n, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**BINDER FOR A LITHIUM-SULFUR BATTERY, POSITIVE ACTIVE MATERIAL COMPOSITION  
COMPRISING SAME AND LITHIUM-SULFUR BATTERY USING SAME**

and invented by:

Seok KIM  
Yong-Ju JUNG  
Ji-Seong HAN  
Jan-Dee KIM

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

### Application Elements

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 22 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☒ Cross References to Related Applications (*if applicable*)
  - c. ☐ Statement Regarding Federally-sponsored Research/Development (*if applicable*)
  - d. ☐ Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings (*if filed*)
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Larg Entity)**

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**Application Elements (Continued)**

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*
- a. ☒ Formal Number of Sheets 2
- b. ☐ Informal Number of Sheets \_\_\_\_\_
4. ☒ Oath or Declaration
- a. ☒ Newly executed *(original or copy)* ☐ Unexecuted
- b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*
- c. ☒ With Power of Attorney ☐ Without Power of Attorney
- d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference *(usable if Box 4b is checked)*  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. ☐ Application Data Sheet (See 37 CFR 1.76)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all must be included)*
- a. ☐ Computer Readable Form (CRF)
- b. ☐ Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statement(s) Verifying Identical Paper and Computer Readable Copy

**Accompanying Application Parts**

9. ☒ Assignment Papers *(cover sheet & document(s))*
10. ☐ 37 CFR 3.73(B) Statement *(when there is an assignee)*
11. ☐ English Translation Document *(if applicable)*
12. ☐ Information Disclosure Statement/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. ☒ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. ☐ Certificate of Mailing
- ☐ First Class ☐ Express Mail *(Specify Label No.):* HAND DELIVERED

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Large Entity)**

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

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**Acc mpanying Applicati n Parts (C ntinued)**

17. ☐ Additional Enclosures *(please identify below):*

**Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)**

18. ☐ Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

***Warning***

***An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.***

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Large Entity)**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

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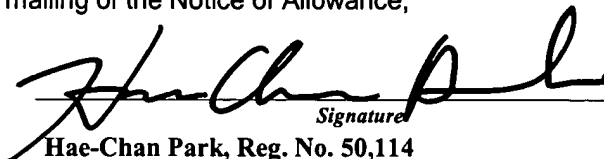
Total Pages in this Submission

**Fee Calculation and Transmittal**

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	30	- 20 =	10	x \$18.00	\$180.00
Indep. Claims	3	- 3 =	0	x \$84.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$750.00
OTHER FEE (specify purpose) _____					\$0.00
TOTAL FILING FEE					\$930.00

- ☒ A check in the amount of \$930.00 to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. 23-1951 as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of \_\_\_\_\_ as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

  
Signature

Hae-Chan Park, Reg. No. 50,114  
McGuireWoods LLP  
1750 Tysons Boulevard, Suite 1800  
McLean, VA 22102  
Telephone No. 703-712-5365  
Facsimile No. 703-712-5280

Dated: July 9, 2003

cc: